



[6450-01-P]

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

[Case No. RF-040]

Notice of Petition for Waiver of Sub-Zero from the Department of Energy Residential Refrigerator and Refrigerator-Freezer Test Procedure and Grant of Interim Waiver

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of Petition for Waiver, Notice of Granting Application for Interim Waiver, and Request for Public Comments.

SUMMARY: This notice announces receipt and publication of a petition for waiver submitted by the Sub-Zero Group, Inc. from specified portions of the U.S. Department of Energy (DOE) test procedure for determining the energy consumption of electric refrigerators and refrigerator-freezers. Sub-Zero's request pertains to the specific hybrid refrigerated "storage-wine storage" basic models set forth in its petition. Sub-Zero seeks permission to use an alternate test procedure to test the wine chiller compartment of these devices at 55 °F instead of the prescribed temperature of 39 °F. That procedure would apply a K factor (correction factor) value of 0.85 when calculating the energy consumption of a tested model and replace the energy consumption calculation currently required under 10 CFR Part 430, Appendix A. DOE solicits comments, data, and information concerning Sub-Zero's petition and the suggested alternate test procedure.

Today's notice also grants Sub-Zero with an interim waiver from the electric refrigerator-freezer test procedure, subject to use of the alternative test procedure set forth in this notice.

DATES: DOE will accept comments, data, and information with respect to the Sub-Zero Petition until **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may submit comments, identified by case number "RF-040," by any of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.
- E-mail: AS_Waiver_Requests@ee.doe.gov Include the case number [Case No. RF-040] in the subject line of the message.
- Mail: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE-5B/1000 Independence Avenue, SW, Washington, DC 20585-0121. Telephone: (202) 586-2945. Please submit one signed original paper copy.
- Hand Delivery/Courier: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 950 L'Enfant Plaza SW, Suite 600, Washington, DC 20024. Please submit one signed original paper copy.

Docket: For access to the docket to review the background documents relevant to this matter, you may visit the U.S. Department of Energy, 950 L'Enfant Plaza SW, Washington, DC, 20024; (202) 586-2945, between 9:00 a.m. and 4:00 p.m., Monday through Friday, except Federal holidays. Available documents include the following items: (1) this notice; (2) public comments

received; (3) the petition for waiver and application for interim waiver; and (4) prior DOE rulemakings regarding similar refrigerator-freezers. Please call Ms. Brenda Edwards at the above telephone number for additional information.

FOR FURTHER INFORMATION CONTACT: Mr. Bryan Berringer, U.S. Department of Energy, Building Technologies Program, Mail Stop EE-5B, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 586-0371. E-mail: Bryan.Berringer@ee.doe.gov.

Mr. Michael Kido, U.S. Department of Energy, Office of the General Counsel, Mail Stop GC-71, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585-0103. Telephone: (202) 586-8145. E-mail: Michael.Kido@hq.doe.gov.

SUPPLEMENTARY INFORMATION:

I. Background and Authority

Title III, Part B of the Energy Policy and Conservation Act of 1975 (EPCA), Pub. L. 94-163 (42 U.S.C. 6291-6309, as codified), established the Energy Conservation Program for Consumer Products Other Than Automobiles, a program covering most major household appliances, which includes the electric refrigerators and refrigerator-freezers that are the focus of this notice.¹ Part B includes definitions, test procedures, labeling provisions, energy conservation standards, and the authority to require information and reports from manufacturers. Further, Part B authorizes the Secretary of Energy to prescribe test procedures that are

¹ For editorial reasons, upon codification in the U.S. Code, Part B was re-designated Part A.

reasonably designed to produce results which measure the energy efficiency, energy use, or estimated annual operating costs of a covered product, and that are not unduly burdensome to conduct. (42 U.S.C. 6293(b)(3)) The test procedure for electric refrigerators and electric refrigerator-freezers is contained in 10 CFR part 430, subpart B, appendix A.

The regulations set forth in 10 CFR 430.27, which were recently amended, contain provisions that enable a person to petition DOE to obtain a waiver from the test procedure requirements for covered products. See 79 FR 26591 (May 9, 2014) (revising 10 CFR 430.27, effective June 9, 2014). (DOE notes that while the previous version of 10 CFR 430.27 was effective at the time of Sub-Zero's submission, the substantive aspects of this regulation have not been changed by the May 9th rule.) Under 10 CFR 430.27, the Assistant Secretary for Energy Efficiency and Renewable Energy (the Assistant Secretary) will grant a waiver if it is determined that the basic model for which the petition for waiver was submitted contains one or more design characteristics that prevents testing of the basic model according to the prescribed test procedures, or if the prescribed test procedures may evaluate the basic model in a manner so unrepresentative of its true energy consumption characteristics as to provide materially inaccurate comparative data. 10 CFR 430.27(l). Petitioners must include in their petition any alternate test procedures known to the petitioner to evaluate the basic model in a manner representative of its energy consumption. DOE may grant the waiver subject to conditions, including adherence to alternate test procedures. 10 CFR 430.27(l). Waivers remain in effect pursuant to the provisions of 10 CFR 430.27(m).

The waiver process also allows the Assistant Secretary to grant an interim waiver from test procedure requirements to manufacturers that have petitioned DOE for a waiver of such prescribed test procedures. 10 CFR 430.27(g). An interim waiver remains in effect for 180 days or until DOE issues its determination on the petition for waiver, whichever occurs earlier. DOE may extend an interim waiver for an additional 180 days. 10 CFR 430.27(h).

II. Petition for Waiver of Test Procedure

Sub-Zero is seeking a waiver from the test procedure applicable to residential electric refrigerators and refrigerator-freezers set forth in 10 CFR part 430, Subpart B, Appendix A. In its petition, Sub-Zero explained that it produces a hybrid refrigerator basic model (i.e. refrigerators that have a combination of one or more refrigerated storage compartments and a wine storage compartment). Sub-Zero asserts that the DOE test procedure does not contain a method to test these types of hybrid products in a manner that would “truly represent[] the energy-consumption characteristics of these products” and offered an alternate test procedure that Sanyo E&E Corporation (Sanyo), now Panasonic Appliances Refrigeration Systems Corporation of America (PAPRSA), used in prior waiver requests. See 77 FR 49443 (Aug. 16, 2012) and 78 FR 57139 (Sept. 17, 2013). (On October 4, 2012, a correction notice to the August 16, 2012 Decision and Order was published. See 77 FR 60688.) These earlier decisions incorporated a K factor (correction factor) value of 0.85 when calculating the energy consumption of a tested model (77 FR 60688). Sub-Zero is requesting that it be permitted to apply the same procedure when testing the energy usage of its hybrid refrigerated storage-wine storage models.

Against this background, DOE had previously issued guidance in 2011 that clarified the test procedures to be used for hybrid products such as the Sub-Zero models at issue. That

guidance is available at the following link:

http://www1.eere.energy.gov/buildings/appliance_standards/residential/pdfs/refrigerator_definition_faq.pdf

The guidance specifies that basic models that do not have a separate wine storage compartment with a separate exterior door, such as those models identified in Sub-Zero's petition, are to be tested using the DOE test procedure in Appendix A, with the temperatures specified therein. Sub-Zero's waiver request seeks to replace the application of this general guidance with the more recent and specific approach outlined in determinations for similar hybrid products offered by Sanyo and PAPRSA when measuring the efficiency of these products.

Sub-Zero also requests an interim waiver from the existing DOE test procedure. An interim waiver may be granted if it is determined that the applicant will experience economic hardship if the application for interim waiver is denied, if it appears likely that the petition for waiver will be granted, and/or the Assistant Secretary determines that it would be desirable for public policy reasons to grant immediate relief pending a determination of the petition for waiver. See 10 CFR 430.27(g).

For the reasons discussed above, DOE has determined that use of the currently required DOE test procedure would provide test results so unrepresentative as to provide materially inaccurate comparative data. Therefore, it appears likely that Sub-Zero's petition for waiver will be granted. For these same reasons, DOE has also determined that it is desirable for public policy reasons to grant Sub-Zero immediate relief pending a determination of the petition for waiver. DOE grants Sub-Zero's application for interim waiver from testing of its hybrid refrigerated storage-wine storage basic models.

Therefore, *it is ordered that*:

The application for interim waiver filed by Sub-Zero is hereby granted for Sub-Zero's hybrid refrigerated storage-wine storage basic product lines are subject to the following specifications and conditions below. Sub-Zero shall be required to test and rate its hybrid refrigerated storage-wine storage product line according to the alternate test procedure as set forth in section III, "Alternate test procedure."

The following basic models are included in Sub-Zero's petition:

IW-30R

DOE makes decisions on waivers for only those models specifically set out in the petition, not future models that may be manufactured by the petitioner. Sub-Zero may submit a subsequent petition for waiver for additional models of electric refrigerators and refrigerator-freezers for which it seeks a waiver from the DOE test procedure. In addition, DOE notes that the grant of a waiver does not release a petitioner from the certification requirements set forth at 10 CFR part 429.

Further, this interim waiver is conditioned upon the presumed validity of statements, representations, and documents provided by the petitioner. DOE may revoke or modify this interim waiver at any time upon a determination that the factual basis underlying the petition for waiver is incorrect, or upon a determination that the results from the alternate test procedure are unrepresentative of the basic models' true energy consumption characteristics.

III. Alternate Test Procedure

Sub-Zero submitted an alternate test procedure to account for the energy consumption of its hybrid refrigerated storage-wine storage products. That alternate procedure would test this product according to the procedure specified in appendix A to subpart B of 10 CFR part 430 except with a standardized temperature for the wine chiller compartment of 55 °F, instead of the prescribed 39 °F. Sub-Zero shall also use the K factor (correction factor) value of 0.85 when calculating the energy consumption of the model listed and calculate the energy consumption of this model as follows:

Energy consumption is defined by the higher of the two values calculated by the following two formulas (according to 10 CFR part 430, subpart B, Appendix A):

Energy consumption of the wine compartment:

$$E_{\text{Wine}} = ET1 + [(ET2 - ET1) \times (55 \text{ °F} - TW1)/(TW2 - TW1)] * 0.85$$

Energy consumption of the refrigerated beverage compartment:

$$E_{\text{Refrigerated Compartment}} = ET1 + [(ET2 - ET1) \times (39 \text{ °F} - TRC1)/(TRC2 - TRC1)].$$

IV. Summary and Request for Comments

Through today's notice, DOE grants Sub-Zero an interim waiver from the specified portions of the test procedure applicable to Sub-Zero's line of hybrid refrigerated storage-wine storage basic models and announces receipt of Sub-Zero's petition for waiver from those same portions of the test procedure. DOE is publishing Sub-Zero's petition for waiver in its entirety.

The petition contains no confidential information. The petition includes a suggested alternate test procedure to determine the energy consumption of Sub-Zero's specified hybrid refrigerators. Sub-Zero is required to follow this alternate procedure as a condition of its interim waiver, and DOE is considering including this alternate procedure in its subsequent Decision and Order.

DOE solicits comments from interested parties on all aspects of the petition, including the suggested alternate test procedure and calculation methodology. Any person submitting written comments to DOE must also send a copy of such comments to the petitioner. The contact information for the petitioner is: Paul V. Sikir, Vice President of Design Engineering, Sub-Zero Group, Inc., 4717 Hammersley Road, Madison, Wisconsin 53711. All submissions received must include the agency name and case number for this proceeding. Submit electronic comments in WordPerfect, Microsoft Word, Portable Document Format (PDF), or text (American Standard Code for Information Interchange (ASCII)) file format and avoid the use of special characters or any form of encryption. Wherever possible, include the electronic signature of the author. DOE does not accept telefacsimiles (faxes).

Issued in Washington, DC, on September 10, 2014.

Kathleen B. Hogan
Deputy Assistant Secretary for Energy Efficiency
Energy Efficiency and Renewable Energy

SUB-ZERO GROUP, INC.
4717 Hammersley Road
Madison, WI 53711

May 19th, 2014

The Honorable David Danielson
Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Secretary Danielson:

Pursuant to 10 CFR 430.27, Sub-Zero respectfully requests expedited attention to this Petition for both an interim and final waiver to modify the DOE test procedure (10 CFR 430 Subpart B Appendix A) for Sub-Zero hybrid refrigerated storage-wine storage products. Without this waiver, we are unable to certify models as compliant with new DOE minimum efficiency standards effective in 2014. This request is similar to past petitions for waivers that have been granted by DOE to Sanyo (77FR49443) and PAPRSA (78FR35894).

The Department's regulations provide that the Assistant Secretary will grant a Petition upon “determination that the basic model for which the waiver was requested contains a design characteristic which either prevents testing of the basic model according to the prescribed test procedures, or the prescribed test procedures may evaluate the basic model in a manner so unrepresentative of its true energy consumption characteristics as to provide materially inaccurate comparative data.” Sub-Zero requests that the Assistant Secretary grant this petition on both grounds.

In granting the Sanyo petition, DOE acknowledged that wine storage compartments cannot be tested at the prescribed temperature of 38 °F (now 39 °F in the revised Refrigerator Test Procedure), because the minimum wine compartment temperature is higher. Sanyo submitted an alternate test procedure to account for the energy consumption of its wine storage/beverage center models. That alternate procedure would test the wine storage compartment at 55 °F, instead of the prescribed 38 °F. To justify the use of this standardized temperature for testing; Sanyo stated in its petition that it designed these models to provide an average wine compartment temperature of 55 to 57 °F, which it determined is a commonly recommended temperature for wine storage. This temperature is presumed to be representative of expected consumer use. DOE also noted that the test procedures for wine products adopted by the Association of Home Appliance Manufacturers (AHAM), California Energy Commission (CEC), and Natural Resources Canada all use the standardized temperature of 55 °F for wine storage compartments; consistent with Sanyo's petition. Furthermore, DOE prescribed that Sanyo also use the proposed K factor (correction factor) value of 0.85 when calculating energy consumption.

DOE granted Sanyo's waiver petition in 2012, acknowledging that the existing test procedure cannot properly measure the energy consumed in actual consumer usage. Thereafter in 2013, DOE granted PAPRSA's similar waiver application.

Sub-Zero is a family-owned company that has been headquartered in Madison, Wisconsin for over 65 years. Sub-Zero developed the niche market for customized built-in residential refrigeration and manufactures all our products in the United States, with factories in Wisconsin and Arizona. While technically not a "small business" using DOE's definition, Sub-Zero is a small producer of refrigeration products striving to compete in an age of large, multi-national manufacturers and is one of the few remaining U.S. companies that produce all of its products here in the U.S. The company's future viability is clearly threatened by this situation and we sincerely ask DOE to grant immediate relief.

Issues with the DOE Test Procedure

Sub-Zero is requesting a waiver to the test procedures for its hybrid models that consist of a combination of one or more refrigerated storage compartments and a wine storage compartment. While DOE considers such hybrid models as covered products, there is no current DOE test procedure appropriate to these hybrid models. Therefore, the current testing requirements do not measure energy usage in a manner that truly represents the energy-consumption characteristics of these products. Further, it is not even possible to test these models under the existing testing procedures. DOE fully recognizes these issues associated with testing hybrid wine products and has initiated a rulemaking to address these products in the future. Therefore Sub-Zero requests this waiver until such time as DOE's rulemaking is complete.

As explained in the Sanyo petition, wine connoisseurs recommend an average of 55-57 °F for the long term storage of wine, and Sub-Zero has also designed the wine storage compartments of its products with this ideal average temperature in mind. Since various wines have different ideal drinking temperatures, products are designed such that the wine storage compartment can achieve a range of temperatures above 39 °F. DOE's test procedures (10 CFR 430 Subpart B Appendix A) specify that energy consumption be determined at a compartment temperature of 39 °F and therefore cannot apply to a product that is designed to be incapable of achieving this temperature. Further, as described in the Sanyo petition, hybrid models will typically have door-opening usage aligned with household freezers and wine storage products. Thus, the K factor (correction factor) of .85 from CAN/CSA 300-08 6.3.1.2 and AHAM/ANSI HRF-1 should be used to determine energy consumption.

Proposed Modified Test Procedure

As in the two previously granted petitions, the wine storage compartment shall be tested at 55 °F.

Sub Zero shall use the K factor (correction factor) value of 0.85 when calculating the energy consumption of the models listed below.

The energy consumption is defined by the higher of the two values calculated by the following two formulas (according to 10 CFR Part 430, subpart B, Appendix A):

Energy consumption of the wine compartment:

$$E_{\text{Wine}} = ET1 + [(ET2-ET1) \times (55^{\circ}\text{F}-TW1)/(TW2-TW1)] * 0.85$$

Energy consumption of the refrigerated compartment:

$$E_{\text{Refrigerated Compartment}} = ET1 + [(ET2-ET1) \times (39^{\circ}\text{F}-TRC1)/(TRC2-TRC1)].$$

Affected Models

The basic models of Sub-Zero hybrid refrigerated storage-wine storage products affected are:

IW-30R

In conclusion, this is a critical issue for our company and we request that DOE expedite the handling of this petition for an interim and final waiver. Sub-Zero would be pleased to discuss this waiver petition with DOE and provide any additional information that the Department might require. We will also notify all manufacturers known to us of similar domestically marketed products of this waiver petition.

Sincerely,

Paul V. Sikir
Vice President of Design Engineering

Via email: AS_Waiver_Requests@ee.doe.gov

[\[FR Doc. 2014-22227 Filed 09/16/2014 at 8:45 am; Publication Date: 09/17/2014\]](#)